



Highlights

- 📶 200 Mbps net aggregate throughput*
- 📶 Native TDM (Up to 16 E1s/T1s) *
+ Ethernet over the same link
- 📶 5Ghz
- 📶 Long range – 150kms*
- 📶 Advanced MIMO, OFDM and Diversity technologies



Reaching 200 Mbps aggregate throughput and providing IP and TDM over same link make this product ideal for today's and tomorrow's networks, preparing operators for the seamless migration from legacy TDM to all-IP networks such as LTE/4G.

Radio Technologies Inside

OFDM Modulation

Orthogonal Frequency-Division Multiplexing (OFDM) is a leading modulation technique that enables effective transmission of large amounts of digital data over a radio link in multi-path and signal intensive environments. Based on the concept of redundant transmission, OFDM works by splitting the radio signal into multiple smaller sub-carriers transmitted simultaneously at different frequencies to the receiver. OFDM enables MMS MAX MIMO to operate smoothly even in challenging non line-of-sight environments.



MIMO

MIMO (Multiple Input Multiple Output) spatial multiplexing gives MMS MIMO the power to increase channel capacity, extend operational range and enhance link availability without the need for additional bandwidth or transmit power. The high-rate information signal is split into two lower-rate streams, with each stream transmitted from a different antenna on the same frequency channel and efficiently reproduced at the receiver side.

Diversity

Antenna diversity uses two antennas to improve the quality and reliability of the wireless link. When applied, the same data stream is duplicated and transmitted over both antennas allowing the receiver to select the best of the two signals. Employing antenna diversity allows MMS MAX MIMO to compensate for multipath interference and improves wireless connectivity.

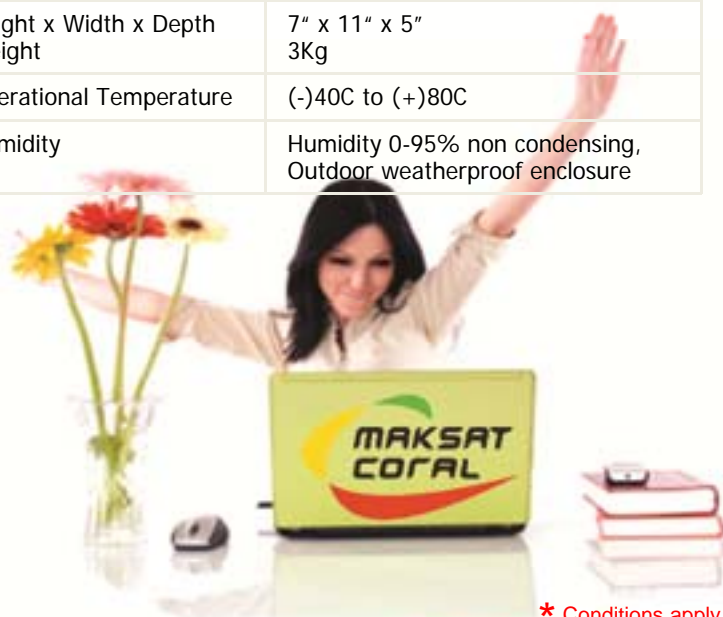


* Conditions apply

Specifications:

| | |
|--|---|
| Radio Operation | 5GHz |
| Channel Width | (+/-) 2.5 Mhz, 5 Mhz, 10 Mhz |
| Receive Sensitivity | Uptp -96dBm |
| Processing Gain | > 10 dB |
| Antenna | Dual polarity Maksat Dish, 29dbi, 60cm |
| Integrated Design | 23dbi Cross Polarity Integrated |
| Option of Additional Ethernet 10/100 Interface | Yes, upto 3 |
| Wireless Data Rate | 54 Mbps, 108 Mbps |
| Super fast Mode upto 108 Mbps | Yes |
| RF Modulation Scheme | QAM64, QAM16, QPSK, BPSK, CCK (OFDM, DSSS) |
| Duplex Format | TDD, FDD |
| Certification | FCC, ISO 9001-2000 |
| Range | Up to 150Km* |
| Output Power | Super power MIMO, upto 26dBm |
| Software controllable | Yes (Steps of 1 dB) |
| Extended Range (XR) | Best in the industry (-) 105 dBm |
| Watch Dog Timer | Software/Hardware/Temperature |
| QOS/COS/GOS | Yes |
| Bandwidth Management | Yes |
| Router | Yes |
| Monitor/Control | Through Ethernet port using HTTP/HTTPS/Telnet |
| Packet Format | IEEE 802.3 and Ethernet II |

| | |
|-------------------------------|---|
| Network Connection | 10 /100 Base T |
| | RJ Female Ethernet Connection |
| Bridge Functionality | Intelligent Local Packet Filtering (self-learning), Node by node user configurable data rates (CIR and MBR) |
| Network Topologies | Any point-to Multipoint |
| | Multipoint-to Multipoint |
| Repeater Mode | Built-in Mode |
| RF Collision Management | Combined TDD and FEC |
| Security | 256 bit AES, WPA and WPA2 encryption, Security, VPN and firewall |
| Data Security Password | Network attachment is password protected |
| Remote Management | HTTP ,Telnet |
| SNMP | MIB2 |
| Management Port Functionality | Full configuration/management from any station through a command line |
| Software Management | File download over RF for firmware updates |
| Power Adapter Requirement | 110 VAC or 220 VAC , 7V - 18V DC |
| Power Consumption | Less than 20W (fully loaded) |
| Height x Width x Depth Weight | 7" x 11" x 5" 3Kg |
| Operational Temperature | (-)40C to (+)80C |
| Humidity | Humidity 0-95% non condensing, Outdoor weatherproof enclosure |



* Conditions apply



Specifications:



| MCS Index | Spatial Streams | Modulation Type | Coding Rate | Data Rate Mb/s | | | |
|-----------|-----------------|------------------------|-------------|----------------|----------|----------------|----------|
| | | | | 20 MHz channel | | 40 MHz channel | |
| | | | | 800ns GI | 400ns GI | 800ns GI | 400ns GI |
| 0 | 1 | BPSK | 1/2 | 6.50 | 7.20 | 13.50 | 15.00 |
| 1 | 1 | QPSK | 1/2 | 13.00 | 14.40 | 27.00 | 30.00 |
| 2 | 1 | QPSK | 3/4 | 19.50 | 21.70 | 40.50 | 45.00 |
| 3 | 1 | 16-QAM | 1/2 | 26.00 | 28.90 | 54.00 | 60.00 |
| 4 | 1 | 16-QAM | 3/4 | 39.00 | 43.30 | 81.00 | 90.00 |
| 5 | 1 | 64-QAM | 2/3 | 52.00 | 57.80 | 108.00 | 120.00 |
| 6 | 1 | 64-QAM | 3/4 | 58.50 | 65.00 | 121.50 | 135.00 |
| 7 | 1 | 64-QAM | 5/6 | 65.00 | 72.20 | 135.00 | 150.00 |
| 8 | 2 | BPSK | 1/2 | 13.00 | 14.40 | 27.00 | 30.00 |
| 9 | 2 | QPSK | 1/2 | 26.00 | 28.90 | 54.00 | 60.00 |
| 10 | 2 | QPSK | 3/4 | 39.00 | 43.30 | 81.00 | 90.00 |
| 11 | 2 | 16-QAM | 1/2 | 52.00 | 57.80 | 108.00 | 120.00 |
| 12 | 2 | 16-QAM | 3/4 | 78.00 | 86.70 | 162.00 | 180.00 |
| 13 | 2 | 64-QAM | 2/3 | 104.00 | 115.60 | 216.00 | 240.00 |
| 14 | 2 | 64-QAM | 3/4 | 117.00 | 130.00 | 243.00 | 270.00 |
| 15 | 2 | 64-QAM | 5/6 | 130.00 | 144.40 | 270.00 | 300.00 |



* Conditions apply